Issuance Date: June 23, 2011
Effective Date: July 1, 2011
Expiration Date: June 30, 2016

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT No. WA-000089-2

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Kaiser Aluminum Fabricated Products, LLC
P.O. Box 15108
Spokane Valley, WA 99215

Facility Location: 15000 E Euclid Ave, Spokane Valley, WA 99215	Receiving Water: Spokane River
Water Body I.D. No.: WA-57-1010	Discharge Location: Latitude: 47.68611 N Longitude: 117.222222 W.
Industry Type: Aluminum Casting and Forming	

is authorized to discharge in accordance with the special and general conditions which follow.

James M. Bellatty
Water Quality Section Manager
Eastern Regional Office
Washington State Department of Ecology

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SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A	Discharge Monitoring Report	Monthly	August 15, 2011
S3.E	Noncompliance Notification	As necessary	-
S4	Best Management Practice (BMP) Plan for Total Phosphorus, CBOD, and Ammonia	-	July 1, 2012
S4	BMP Plan Update	Annually	July 1, 2013
S5	Annual Status Report	Annually	July 1, 2012
S5	Technology Selection Protocol	-	July 1, 2013
S5	Delta Management Plan	-	July 1, 2013
S5	Engineering Report for Treatment Technology	-	July 1, 2014
S5	Installation and Operation of Phosphorus Treatment Technology (confirmation letter)	-	July 1, 2016
S7	Regional Toxics Task Force	-	November 30, 2011
S8.A	Operations and Maintenance Manual	-	April 1, 2012
S8.A	Operations and Maintenance Manual Update or Review Confirmation Letter	As necessary	-
S8.A	Treatment System Operating Plan	-	April 1, 2012
S8.B	Reporting Bypasses	As necessary	
S9	Application for Permit Renewal	1/permit cycle	January 1, 2016
S12	Spill Plan	1/permit cycle, updates submitted as necessary	April 1, 2012
S13.A	Acute Toxicity Characterization Data	Quarterly (for 1 year)	November 1, 2011 60 days after each subsequent sampling event
S13.A	Acute Toxicity Tests Characterization Summary Report	1/permit cycle	90 days following the last characterization sampling event

Permit Section	Submittal	Frequency	First Submittal Date
S13.C	Acute Toxicity Compliance Monitoring Reports	As necessary	December 27, 2012 60 days after each subsequent sampling event
S13.D	Acute Toxicity: "Causes and Preventative Measures for Transient Events."	As necessary	-
S13.D	Acute Toxicity TI/TRE Plan	As necessary	-
S13.E	Acute Toxicity Effluent Test Results with Permit Renewal Application	2/permit cycle	Once in the Last Summer & Once in the Last Winter Prior to Submission of the Renewal Application)
S14.A	Chronic Toxicity Characterization Data	Quarterly (for 1 year)	November 1, 2011 60 days after each subsequent sampling event
S14.A	Chronic Toxicity Tests Characterization Summary Report	1/permit cycle	90 days following the last characterization sampling event
S14.C	Chronic Toxicity Compliance Monitoring Reports	As necessary	December 27, 2012 60 days after each subsequent sampling event
S14.D	Chronic Toxicity: "Causes and Preventative Measures for Transient Events."	As necessary	-
S14.D	Chronic Toxicity TI/TRE Plan	As necessary	-
S14.E	Chronic Toxicity Effluent Test Results with Permit Renewal Application	2/permit cycle	Once in the Last Summer & Once in the Last Winter Prior to Submission of the Renewal Application)
G1	Notice of Change in Authorization	As necessary	-
G4	Permit Application for Substantive Changes to the Discharge	As necessary	-
G5	Engineering Report for Construction or Modification Activities	As necessary	-
G7	Notice of Permit Transfer	As necessary	-
G21	Reporting Anticipated Non-compliance	As necessary	-
G22	Reporting Other Information	As necessary	-

SPECIAL CONDITIONS

S1. DISCHARGE LIMITATIONS

A. Process Wastewater Discharges

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit.

The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

1. Final Discharge to Spokane River (Outfall 001)

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge stormwater, groundwater and treated wastewater at the permitted location subject to complying with the following limitations:

EFFLUENT LIMITATIONS: OUTFALL # 001 Final Discharge to Spokane River		
Parameter	**Average Monthly[a]**	**Maximum Daily[b]**
Total Zinc, µg/L	75	146
Total Lead, µg/L	7.0 (1,2)	12.1 (1,3)
Total Cadmium, µg/L	1.3 (1,2)	2.2 (1,3)
pH[c]	Daily minimum is equal to or greater than 6.0 and the daily maximum is less than or equal to 9.0	
	Interim Limits[d]	
Parameter	**Average Monthly[a]**	**Maximum Daily[b]**
Total Phosphorus[e] (as P), lbs/day	1.3	2.9
Ammonia, lbs/day	See Permit Condition S4.	
$CBOD_5$, lbs/day	See Permit Condition S4.	
Total PCBs	See Permit Condition S6.	
[a] The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.		
[b] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.		
[c] Indicates the range of permitted values. Any excursions below 5.0 and above 10.0 at any time are violations. The instantaneous maximum and minimum pH shall be reported monthly. When pH is continuously monitored, excursions between 5.0 and 6.0, or 9.0 and		

10.0 shall not be considered violations provided no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month.
[d] See Special Condition S5 for the Waste Load Allocations, Schedule of Compliance, and Final Water Quality Based Effluent Limits for total phosphorus, CBOD, and ammonia.
[e] Shall be calculated by summing the quantities discharged from Outfalls 002 and 003. This limit applies from March 1st to October 31st.

Footnotes:

(1) The method, method detection level (MDL) and quantitation level (QL) for lead and cadmium are as follows:

Metal	Method (40 CFR Part 136)	MDL, µg/L	QL (3.14 x MDL), µg/L
Lead	200.8	0.6	1.9
Cadmium	213.2	0.1	0.3

These QLs will be used for assessment of compliance with these effluent limits. If the Permittee is unable to attain the MDL and QL in its effluent due to matrix effects, the Permittee shall submit a matrix specific MDL and QL to the Department of Ecology (Ecology) by (nine months after effective date). The matrix specific MDL and QL shall be calculated as follows:

MDL = 3.14 x (standard deviation of 7 replicate spiked samples). This corresponds to the calculation of the method detection limit, as defined in 40 CFR Part 136, Appendix B, with the provision that the MDL be calculated for a specific effluent matrix.

The QL = 3.14 x MDL

Check standards at concentrations equal to the QL shall be analyzed alongside all compliance monitoring samples. Check standards shall be produced independently of calibration standards and maintained as a part of the Permittee's records. All check standard recovery data and duplicate measurements shall be submitted to Ecology in the discharge monitoring report. Ecology's precision goal is +/- 20%.

When the maximum daily effluent limit is greater than the QL, compliance determinations are made by direct comparison of the limit with the sample measurement. When the maximum daily effluent limit is less than the QL, samples measured below the QL may be in compliance with the effluent limit, and data in this range will usually not be used to support enforcement actions.

(2) Average values shall be calculated as follows: measurements below the MDL = 0; measurements greater than the MDL = the measurement.

(3) If the measured effluent concentration is below the QL as determined in Footnote #1 above, the Permittee shall report NQ for non-quantifiable.

2. Black Walnut Shell (BWS) Effluent (Outfall 006)

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge treated wastewater into final Outfall 001 subject to complying with the following limitations:

EFFLUENT LIMITATIONS: OUTFALL # 006 Black Walnut Shell (BWS) Effluent		
Parameter[a]	**Average Monthly[b]**	**Maximum Daily[c]**
Total Chromium, lbs/day	2.1	5.1
Cyanide, lbs/day	0.53	1.27
Total Aluminum, lbs/day	23.4	46.8
Oil & Grease, lbs/day	655.1	710.5
TSS, lbs/day	709.4	1,142.1
[a] Discharge quantities of Chromium, Aluminum, Oil & Grease, and TSS shall be calculated on a net basis by subtracting plant intake water loadings from Outfall 006 loadings. When sample measurements for compliance with mass-based limits fall below the MDL, the average loading shall be calculated using a concentration value of zero. When sample measurements for compliance with mass-based limits fall above the MDL, the average loading shall be calculated using the measured concentration.		
[b] The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.		
[c] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.		

3. Industrial Treatment Plant Effluent (Outfall 002)

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge treated process wastewater into the wastewater settling lagoon subject to complying with the following limitations:

EFFLUENT LIMITATIONS: OUTFALL # 002 Industrial Wastewater Treatment (IWT) Plant Effluent		
Parameter	**Average Monthly[a]**	**Maximum Daily[b]**
Total Chromium, lbs/day	0.57	1.36
Cyanide, lbs/day	0.38	0.91
Total Zinc, lbs/day	1.89	4.54
Total Aluminum, lbs/day	9.93	20.1
Oil & Grease, lbs/day	37.2	62.1
TSS, lbs/day	60.4	127.2
[a] The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.		

[b] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.

4. Sanitary Sewage Effluent (Outfall 003)

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge treated sanitary sewage into the wastewater lagoon subject to complying with the following limitations:

EFFLUENT LIMITATIONS: OUTFALL # 003 Sanitary Wastewater		
Parameter	**Average Monthly[a]**	**Average Weekly[a]**
BOD_5	30 mg/L, 48 lbs/day	45 mg/L, 72 lbs/day
TSS	30 mg/L, 48 lbs/day	45 mg/L, 72 lbs/day
Fecal Coliform[b]	200 colonies/100 ml	400 colonies/100 ml
[a] The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.		
[b] Total residual chlorine shall be maintained which is sufficient to attain the fecal coliform limits specified above. Chlorine concentrations in excess of that necessary to reliably achieve these limits shall be avoided.		

B. Mixing Zone Descriptions

The maximum boundaries of the mixing zones are defined as follows:

At the 7Q10 river flow, the mixing zone shall not utilize greater than 25 percent of the flow (dilution factor of 5.86; 17.1% effluent). A zone where acute criteria may be exceeded shall not utilize greater the 2.5 percent of the flow (dilution factor of 1.39; 71.8% effluent).

S2. MONITORING REQUIREMENTS

The Permittee shall monitor in accordance with the following schedule:

A. Monitoring Schedule

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Final Effluent (Outfall 001)	Flow	mgd	Final Effluent Monitoring Station	Continuous[a]	Meter
	pH[b]	s.u.	"	"	"
	Temperature	°F	"	"	"

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
	Total Zinc	µg/L	"	2/week	24-hour composite
	Total Lead	µg/L	"	"	"
	Total Cadmium	µg/L	"	"	"
	Total P (as P)[c]	ug/L, lbs/day	"	"	"
	Total Reactive P (as P)[c]	ug/L, lbs/day	"	"	"
	$CBOD_5$	mg/L, lbs/day	"	"	"
	Ammonia (as N)[c]	mg/L, lbs/day	"	"	"
	Total PCBs[d]	pg/L	"	2/month	"
Black Walnut Shell Effluent (Outfall 006)	Flow	mgd	BWS Effluent	Continuous*	Meter
	Total Chromium	mg/L, lbs/day	"	2/week	24-hour composite
	Cyanide[e]	"	"	"	"
	Total Aluminum	"	"	"	"
	TSS	"	"	"	"
	Oil & Grease	"	"	"	grab
Groundwater Remediation Flow (Outfall 007)	Flow	mgd	Discharge Line	Continuous*	Meter
Black Walnut Shell Influent	Flow	mgd	Lagoon Effluent	Continuous*	Meter
	Total PCBs[f]	ng/L, g/day	"	1/every other week	24-hour composite
Industrial Wastewater Treatment (Outfall 002)	Flow	gpd	IWT Effluent	Continuous*	Meter
	Total Chromium	mg/L, lbs/day	"	2/week	24-hour composite
	Cyanide[e]	"	"	"	"
	Total Zinc	"	"	"	"
	Total Aluminum	"	"	"	"
	TSS	"	"	"	"

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
	Total P (as P)	"	"	"	"
	Oil & Grease	"	"	"	grab
Sanitary Wastewater (Outfall 003)	Flow	gpd	Sanitary Treatment Plant Effluent	Continuous*	Meter
	pH	s.u.	"	5/week	grab
	BOD_5	mg/L, lbs/day	"	1/week	24-hour composite
	TSS	mg/L, lbs/day	"	"	"
	Total P (as P)	mg/L, lbs/day	"	2/week	"
	Fecal Coliform	Colonies /100ml	"	1/week	grab
Final Effluent (Outfall 001)	Acute Toxicity Testing	see S5.A.	Final Effluent Monitoring Station	1/quarter[g]	24-hour composite
	Chronic Toxicity Testing	see S6.A.	"	"	"
River Intake (Spokane River)	Flow	gpd	Intake Structure	Continuous*,[h]	Meter
	Total Chromium	mg/L, lbs/day	"	2/week	24-hour composite
	Total Zinc	"	"	"	"
	Total Aluminum	"	"	"	"
	TSS	"	"	"	"
	Total P (as P)[c]	ug/L, lbs/day	"	"	"
	Oil & Grease	mg/L, lbs/day	"	"	grab

* Continuous means uninterrupted - except for brief lengths of time for calibration, power failure, or for unanticipated equipment repair or maintenance. Sampling shall be taken four (4) times per day when continuous monitoring is not possible.

[a] Shall be determined by adding the Outfall 006 and Outfall 007 flowrates.

[b] For facilities which continuously monitor and record pH values, the number of minutes the pH value was below or above the permitted range shall be recorded for each day and the total minutes for the month reported, the durations when values were above and below the permitted range shall be reported separately. The instantaneous maximum and minimum pH shall be reported monthly.

[c] The total phosphorus (as P) and ammonia method detection and quantification levels shall be reported with the analytical results.

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
[d] Total PCBs for Outfall 001 shall be tested using a method that achieves a 50 pg/L target method detection limit, or lower, for all PCB congeners.					
[e] Periodic analyses for cyanide will not be required if both of the following conditions are met: 1. The first wastewater sample taken each calendar year is analyzed and found to contain less than 0.07 mg/l cyanide; and 2. The Permittee certifies in writing to Ecology that cyanide is not and will not be used in the aluminum forming and finishing operations. [f] Total PCBs for the BWS filter influent shall be tested using EPA method 8082 (low-level) having a target detection limit of 5 ng/L for aroclor 1248. [g] Quarters are defined as follows: 1st – January to March; 2nd – April to June; 3rd – July to September; and 4th – October to December. [h] Shall be determined by difference from other metered flowrates.					

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136.

C. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations. Calibration records shall be maintained for at least three years.

D. Laboratory Accreditation

All monitoring data required by the Ecology shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, turbidity, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. Ecology exempts crops, soils, and hazardous waste data from this requirement pending accreditation of laboratories for analysis of these media.

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to Ecology shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during each monitoring period shall be summarized, reported, and submitted on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by Ecology. DMR forms shall be postmarked or received no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit. Priority pollutant analysis data shall be submitted no later than forty-five (45) days following the monitoring period. Total PCB analysis data shall be submitted no later than 15 days after receipt of the laboratory results. Unless otherwise specified, all toxicity test data shall be submitted within sixty (60) days after the sample date. The report(s) shall be sent to: The Department of Ecology, Eastern Regional Office, 4601 N. Monroe, Spokane, Washington 99205.

All laboratory reports providing data for organic and metal parameters shall include the following information: sampling date; sample location; date of analysis; parameter name; CAS number; analytical method/ number; method detection limit (MDL); laboratory practical quantitation limit (PQL); reporting units; and concentration detected. Analytical results from samples sent to a contract laboratory must have information on the chain of custody, the analytical method, QA/QC results, and documentation of accreditation for the parameter.

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three (3) years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling or measurement; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) the individual who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 of this permit, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Noncompliance Reporting

1. The permittee must immediately report the following occurrences of noncompliance:
   a. any noncompliance that may endanger health or the environment;
   b. any unanticipated bypass that exceeds any effluent limitation in the permit (See Part S4.B, “Bypass Procedures”);
   c. any upset that exceeds any effluent limitation in the permit (See G.16, “Upset”);
   d. any violation of limitations listed in Permit Condition S1.A.; or
   e. any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limitation in the permit.

2. The Permittee must also provide a written report within five days of the time that the Permittee becomes aware of any event required to be reported under subpart 1, above. The written report must contain:
   a. a description of the noncompliance and its cause;
   b. the period of noncompliance, including exact dates and times;
   c. the estimated time noncompliance is expected to continue if it has not been corrected;
   d. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance; and
   e. if the non compliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

3. The permittee must report all other instances of noncompliance, not required to be reported immediately, at the time that monitoring reports for S3.A ("Reporting") are submitted. The reports must contain the information listed in S3.E.2 above.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Maintaining a Copy of This Permit

The Permittee shall maintain a copy of this permit at the facility.

S4. BEST MANAGEMENT PRACTICES (BMP) PLAN

The goal of the BMP plan is to maintain, or lower, effluent concentrations of total phosphorus, CBOD, and ammonia at or below current discharge levels.

By July 1, 2012, the permittee shall develop a BMP plan and submit it to Ecology for review and approval. The objective of this plan is to identify pollution prevention and wastewater reduction opportunities. The plan shall include the following:

1. A list of members of a cross-functional team responsible for developing the BMP plan. The list shall include the name of a designated team leader.
2. A description of current and past BMPs and their effectiveness.
3. Identification of technical/economical evaluation of new BMPs. BMPs should include: substitution of materials; reformulation or redesign of products; modification of equipment, facilities, technology, processes, and procedures; and improvement in management, inventory control, materials handling or general operational phases of the facility.
4. A schedule for implementation of economically feasible BMPs.
5. Methods used for measuring progress towards the BMP goal and updating the BMP plan.
6. A description of the testing of any wastestreams (not already required under Special Condition S3. of this permit) and products used within the facility for total phosphorus, CBOD, and ammonia. A summary of these results should also be provided.

Thereafter, the permittee shall submit annual reports to Ecology by July 1st of every year. The annual report shall include: a) all BMP plan monitoring results for the year; b) a summary of effectiveness of all BMPs implemented to meet the BMP plan goal; and c) any updates to the BMP plan.

This permit may be modified, or revoked and reissued, to revise or remove the requirements of this Section based on information collected under this Section.

S5. SCHEDULE OF COMPLIANCE FOR TOTAL PHOSPHORUS, CBOD, AND AMMONIA

Target Pursuit Action	Compliance Date
Annual Status Reports[a]	July 1st of each year
Delta Elimination Plan[b]	July 1, 2013
Technology Selection Protocol for Treatment Technology[c]	July 1, 2013
Engineering Report for Treatment Technology[d]	July 1, 2014
Phosphorus Treatment Technology	July 1, 2016[e]
Meet Final Water Quality Based Effluent Limits[f]	July 1, 2021

[a] The Annual Status Report shall, at a minimum, include detailed updates on the treatment technology (status of report preparation, construction, and/or performance reviews, etc.) and delta elimination plans (status of report preparation, implementation progress, accounting of delta credits earned and expended, etc.). The report shall also include an assessment on the progress of meeting the final water quality based effluent limits (WQBELs) through the combination of treatment technology and delta elimination.

[b] Delta elimination plan will include a schedule for other phosphorus, CBOD and ammonia removal actions such as conservation, effluent re-use, and supporting regional non-point source control efforts to be established.

The delta elimination plan may also include:

- A demonstration that a certain stable fraction of the phosphorus discharged from the facility is not bio-available in the River environment, is not reactive and is not a nutrient source. This demonstration must consider findings and recommendations from the University of Washington/ WERF bioavailability lab study and the DO TMDL Implementation Advisory Committee. The demonstration may also include results from subsequent monitoring and modeling of bio-available phosphorus. Ecology will recognize the demonstration, that a certain stable fraction of the phosphorus discharged from the facility is not bio-available in the River environment, is not reactive and is not a nutrient source through a modification to the Spokane River DO TMDL. Ecology will incorporate any revised WQBELs based on the modified DO TMDL by the second permit cycle, or earlier.
- Any approved trades between Permittees and/or nonpoint sources to reduce nutrients (total phosphorus, CBOD, and ammonia) to the Spokane River and Lake Spokane consistent with the Water Quality Trading Framework developed by Ecology the DO TMDL Implementation Advisory Committee.
- An analysis, subject to Ecology approval and public review and comment, that provides a pollutant loading equivalency relating phosphorus, CBOD and ammonia.
- Implementation of a 'bubble limit' concept for interested Spokane River dischargers where the sum of all wasteload allocations becomes a cap or bubble. Under the bubble limit concept, a discharger is not considered in violation of their individual WQBEL, as long as the collective bubble limit is met during the same reporting period.

The delta elimination plan, in combination with the pollutant reduction from technology, shall provide reasonable assurance of meeting the Permittee's final WQBELs in ten (10) years.

[c] A comprehensive technology selection protocol for choosing the most effective feasible technology for seasonally removing the applicable pollutant from the effluent. If pilot testing is a part of the protocol, there will be appropriate provisions for quality assurance and control. The protocol will include a preliminary schedule for construction of the treatment technology.

[d] After the Permittee implements the technology selection protocol, the permit holder will prepare, and submit to Ecology for approval, an Engineering Report concerning the chosen technology, including any updates to the construction schedule. The Engineering Report will (if necessary) be accompanied by amendments to the schedule and substance of the target pursuit actions so that in combination with the Engineering Report on expected technology performance, there is reasonable assurance of meeting the final WQBELs in ten (10) years.

[e] The Permittee must confirm the installation and operation of the phosphorus treatment technology in writing to Ecology.

[f] The wasteload allocations for ammonia, total phosphorus, and CBOD are 9.0, 3.21, and 462.7 lbs/day seasonal average from March to October, respectively (0.07, 0.025, and 3.6 mg/L, respectively, at a discharge flow of 15.4 mgd). The final WQBELs are shown below:

FINAL WATER QUALITY BASED EFFLUENT LIMITATIONS: OUTFALL # 001 March through October	
Parameter	**Season Average**
Ammonia, lbs/day	9.0
Total Phosphorus, lbs/day	3.21
CBOD, lbs/day	462.7

Compliance with these limitations will be determined by the mass of pollutant measured in the effluent combined with any credits from the Delta Elimination Plan following Ecology approval and public review and comment. Ecology may adjust the final water quality based effluent limitations on the basis of new information following a revision to the Spokane River DO TMDL. This new information may include: the fraction of bio-available phosphorus in the effluent and alternate modeled water quality based effluent limits extended into February or January. Any adjustment of the final effluent limitations that result in less stringent limitations must ensure the dissolved oxygen responsibility for Avista identified in Table 7 of the DO TMDL remains unchanged as determined through the use of the DO TMDL model and is subject to the provisions of the Clean Water Act for deriving limitations in section 303(d)(4)(A), 42 U.S.C. § 1313(d)(4)(A) as well as the anti-backsliding provisions of the Clean Water Act, including the exceptions in section 402(o)(2) of the Clean Water Act, 33 U.S.C. § 1342(o)(2).

S6. BLACK WALNUT SHELL FILTRATION LOADING/PCB SOURCE IDENTIFICATION AND REDUCTION

A. Design Criteria

The following flows and waste loadings for the Black Walnut Shell Filtration System shall not be exceeded:

Average flow: 11 mgd

Total PCB loading: 0.78 g/day

B. PCB Source Identification and Reduction

The Permittee shall continue the PCB source identification and cleanup work as stipulated by Amended Order No. 2868. The goal of this work is to reduce PCBs in the effluent to the maximum extent practicable to bring the Spokane River into compliance with applicable water quality standards for PCBs. The Amended Order is incorporated into this permit by reference as Attachment A.

S7. REGIONAL TOXICS TASK FORCE

The permittee shall participate in a cooperative effort to create a Regional Toxics Task Force and participate in the functions of the Task Force. The Task Force should include NPDES permittees in the Spokane River, conservation/environmental interests, the Spokane Tribe, Spokane Regional Health District, Ecology, and other appropriate interests. The goal of the Regional Toxics Task Force is to develop a comprehensive plan to bring the Spokane River into compliance with applicable water quality standards for PCBs.

To accomplish that goal, Ecology anticipates that the Task Force functions will:

1. Identify data gaps and collect necessary data on PCBs and other toxics on the 2008 year 303(d) list for the Spokane River.

2. Further analyze the existing and future data to better characterize the amounts, sources, and locations of PCBs sources and of other toxics on the 2008 year 303(d) list for the Spokane River.

3. Prepare recommendations for controlling and reducing the sources of listed toxics in the Spokane River.

4. Review proposed Toxic Management Plans, Source Management Plans, and BMPs.

5. Monitor and assess the effectiveness of toxic reduction measures.

6. Identify a mutually agreeable entity to serve as the clearinghouse for data, reports, minutes, and other information gathered or developed by the Task Force and its members. This information shall be made publicly available by means of a website and other appropriate means.

To discharge these functions the Task Force may provide for an independent community technical advisor(s) funded by the permittees, who shall assist in review of data, studies, and control measures, as well as assist in providing technical education information to the public.

By November 30, 2011, the Permittee(s) shall provide Ecology with the organizational structure, specific goals and governing documents, including funding, of the Regional Task Force.

If Ecology determines the Regional Toxics Task Force is failing to make measurable progress toward meeting applicable water quality criteria for PCBs, Ecology would be obligated to proceed with development of a TMDL in the Spokane River for PCBs or determine an alternative to ensure water quality standards are met.

S8. OPERATION AND MAINTENANCE

The Permittee shall, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Operations and Maintenance Manual

An updated Operation and Maintenance (O&M) Manual shall be submitted to Ecology for approval by April 1, 2012. It shall conform to the requirements of WAC 173-240-150. In addition to the requirements of WAC 173-240-150(1) and (2), the O&M Manual shall include:

1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure.
2. Plant maintenance procedures.
3. The treatment plant process control monitoring schedule.

Substantial changes or updates to the O&M Manual shall be submitted to Ecology for review and approval whenever they are incorporated into the manual.

The approved Operations and Maintenance Manual shall be kept available at the permitted facility and all operators are responsible for being familiar with, and using, this manual.

A Treatment System Operating Plan (TSOP) shall be submitted to Ecology as the initial chapter of the updated O&M Manual. This chapter shall be entitled the "Treatment System Operating Plan." For the purposes of this NPDES permit, a TSOP is a concise summary of specifically defined elements of the O&M Manual. The TSOP shall not conflict with the O&M Manual and shall include the following information:

1. A baseline operating condition, which describes the operating parameters and procedures, used to meet the effluent limitations of S1 at the production levels used in developing these limitations.
2. In the event of production rates, which are below the baseline levels used to establish these limitations, the plan shall describe the operating procedures and conditions needed to maintain design treatment efficiency. The monitoring and reporting shall be described in the plan.
3. In the event of an upset, due to plant maintenance activities, severe stormwater events, start ups or shut downs, or other causes, the plan shall describe the operating procedures and conditions employed to mitigate the upset. The monitoring and reporting shall be described in the plan.
4. A description of any regularly scheduled maintenance or repair activities at the facility which would affect the volume or character of the wastes discharged to the wastewater treatment system and a plan for monitoring and treating/controlling the discharge of maintenance-related materials (such as cleaners, degreasers, solvents, etc.).

An updated Treatment System Operating Plan (TSOP) shall be submitted to Ecology with the application for renewal 180 days prior to expiration of the permit. This plan shall be updated and submitted, as necessary, to include requirements for any major modifications of the treatment system.

B. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and Ecology may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

1. Bypass for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions.

   Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee shall submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. Bypass Which is Unavoidable, Unanticipated, and Results in Noncompliance of this Permit.

   This bypass is permitted only if:

   Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

   There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance

during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.

Ecology is properly notified of the bypass as required in condition S3.E of this permit.

3. Bypass which is Anticipated and has the Potential to Result in Noncompliance of this Permit.

   The Permittee shall notify Ecology at least thirty (30) days before the planned date of bypass. The notice shall contain: (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

   For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

   Ecology will consider the following prior to issuing an administrative order for this type bypass:

   a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.

   b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.

   c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

   After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by Ecology under RCW 90.48.120.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

S9. APPLICATION FOR PERMIT RENEWAL

The Permittee shall submit an application for renewal of this permit by December 30, 2015.

S10. SOLID WASTE DISPOSAL

A. Solid Waste Handling

The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

B. Leachate

The Permittee shall not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee shall apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

S11. NON-ROUTINE AND UNANTICIPATED DISCHARGES

A. Beginning on the effective date of this permit, the Permittee may discharge non-routine wastewater on a case-by-case basis if approved by Ecology. Prior to any such discharge, the Permittee shall contact Ecology and **at a minimum** provide the following information:

1. The nature of the activity that is generating the discharge.
2. Any alternatives to the discharge, such as reuse, storage, or recycling of the water.
3. The total volume of water expected to be discharged.
4. The results of the chemical analysis of the water. The water shall be analyzed for all constituents limited for the Permittee's discharge. The analysis shall also include hardness, any metals that are limited by water quality standards, and any other parameter deemed necessary by Ecology. All discharges must comply with the effluent limitations as established in Condition S1 of this permit, water quality standards, sediment management standards, and any other limitations imposed by Ecology.
5. The date of proposed discharge and the rate at which the water will be discharged, in gallons per minute. The discharge rate shall be limited to that which will not cause erosion of ditches or structural damage to culverts and their entrances or exits.
6. If the proposed discharge is to a municipal storm drain and is approved by Ecology, the Permittee shall notify the municipality of the discharge.

B. The discharge cannot proceed until Ecology has reviewed the information provided and has authorized the discharge. Authorization from Ecology will be by letter to the Permittee or by an Administrative Order.

S12. SPILL PLAN

The Permittee shall by April 1, 2012, submit to Ecology an update to the existing Spill Control Plan for the prevention, containment, and control of spills or unplanned discharges of: 1) oil and petroleum products, 2) materials, which when spilled, or otherwise released into the environment, are designated Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070, or 3) other materials which may become pollutants or cause pollution upon reaching state's waters. The Permittee shall review and update the Spill Plan, as needed, at least annually. Changes to the plan shall be sent to Ecology. The plan and any supplements shall be followed throughout the term of the permit.

The updated spill control plan shall include the following:

- A description of the reporting system which will be used to alert responsible managers and legal authorities in the event of a spill.
- A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
- A list of all oil and chemicals used, processed, or stored at the facility which may be spilled into state waters.

For the purpose of meeting this requirement, plans and manuals, or portions thereof, required by 33 CFR 154, 40 CFR 109, 40 CFR 110, 40 CFR Part 112, the Federal Oil Pollution Act of 1990, Chapter 173-181, and contingency plans required by Chapter 173-303 WAC may be submitted.

S13. ACUTE TOXICITY

A. Effluent Characterization

The Permittee shall conduct acute toxicity testing on the final effluent to determine the presence and amount of acute (lethal) toxicity. The two acute toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Effluent characterization for acute toxicity shall be conducted quarterly for one year. Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this section. A dilution series consisting of a minimum of five concentrations and a control shall be used to estimate the concentration lethal to 50% of the organisms (LC_{50}). The percent survival in 100% effluent shall also be reported.

Testing shall begin within sixty (60) days of the permit effective date.

Acute toxicity tests shall be conducted with the following species and protocols:

1. Fathead minnow, *Pimephales promelas* (96-hour static-renewal test, method: EPA-821-R-02-012).

2. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48-hour static test, method: EPA-821-R-02-012). The Permittee shall choose one of the three species and use it consistently throughout effluent characterization.

B. Effluent Limit for Acute Toxicity

The Permittee has an effluent limit for acute toxicity if, after completing one year of effluent characterization, either:

1. The median survival of any species in 100% effluent is below 80%.
2. Any one test of any species exhibits less than 65% survival in 100% effluent.

If an effluent limit for acute toxicity is required by subsection B at the end of one year of effluent characterization, the Permittee shall immediately complete all applicable requirements in subsections C, D, and F.

If no effluent limit is required by subsection B at the end of one year of effluent characterization, then the Permittee shall complete all applicable requirements in subsections E and F.

The effluent limit for acute toxicity is no acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).

In the event of failure to pass the test described in subsection C of this section for compliance with the effluent limit for acute toxicity, the Permittee is considered to be in compliance with all permit requirements for acute whole effluent toxicity as long as the requirements in subsection D are being met to the satisfaction of Ecology.

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance assigned pursuant to WAC 173-201A-100. The zone of acute criteria exceedance is authorized in Section S1.B of this permit. The ACEC equals 71.8% effluent (dilution factor of 1.39).

C. Monitoring for Compliance With an Effluent Limit for Acute Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A on a rotating basis and performed using at a minimum 100% effluent, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless Ecology notifies the Permittee in writing of another species rotation schedule. The percent survival in 100% effluent shall be reported for all compliance monitoring.

Compliance with the effluent limit for acute toxicity means no statistically significant difference in survival between the control and the test concentration representing the ACEC. The Permittee shall immediately implement subsection D if any acute toxicity test conducted for compliance monitoring determines a statistically significant difference in survival between the control and the ACEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the ACEC is less than 10%, the hypothesis test shall be conducted at the 0.01 level of significance.

D. Response to Noncompliance With an Effluent Limit for Acute Toxicity

If the Permittee violates the acute toxicity limit in subsection B, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted weekly for four consecutive weeks using the same test and species as the failed compliance test. Testing shall determine the LC_{50} and effluent limit compliance. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by Ecology as an anomalous test result, the Permittee may notify Ecology that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from Ecology before completing the additional monitoring required in this subsection. The notification to Ecology shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by Ecology that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by Ecology that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to Ecology on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the acute toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to Ecology. The TI/RE plan submittal shall be within sixty (60) days after the sample date for the fourth additional compliance monitoring test. If the Permittee decides to forgo the rest of the additional compliance monitoring tests required in this subsection because one of the first three additional compliance monitoring tests failed to meet the acute toxicity limit, then the Permittee shall submit the TI/RE plan within sixty (60) days after the sample date for the first additional monitoring test to violate the acute toxicity limit. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Acute Toxicity

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial acute effluent characterization or substitutes approved by Ecology shall be used, and results submitted to Ecology as a part of the permit renewal application process.

F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into Ecology's database, then the Permittee shall send the disk to Ecology along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on 24-hour composite effluent samples. Composite samples taken for toxicity testing shall be cooled to 0 - 6 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. Grab samples must be shipped on ice to the lab immediately upon collection. If a grab sample is received at the testing lab within one hour after collection, it must have a temperature below 20° C at receipt. If a grab sample is received at the testing lab within 4 hours after collection, it must be below 12° C at receipt. All other samples must be 0 - 6° C at receipt. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended. The lab shall store all samples at 0 - 6° C in the dark from receipt until completion of the test.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by Ecology, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.

7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

S14. CHRONIC TOXICITY

A. Effluent Characterization

The Permittee shall conduct chronic toxicity testing on the final effluent. The two chronic toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Testing shall begin within sixty (60) days of the permit effective date.

Effluent testing for chronic toxicity shall be conducted quarterly for one year. The Permittee shall conduct chronic toxicity testing during effluent characterization on a series of at least five concentrations of effluent in order to determine appropriate point estimates. This series of dilutions shall include the ACEC. The Permittee shall compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

Chronic toxicity tests shall be conducted with the following two species and the most recent version of the following protocols:

Freshwater Chronic Test	Species	Method
Fathead minnow survival and growth	*Pimephales promelas*	EPA-821-R-02-013
Water flea survival and reproduction	*Ceriodaphnia dubia*	EPA-821-R-02-013

B. Effluent Limit for Chronic Toxicity

After completion of effluent characterization, the Permittee has an effluent limit for chronic toxicity if any test conducted for effluent characterization shows a significant difference between the control and the ACEC at the 0.05 level of significance using hypothesis testing (Appendix H, EPA/600/4-89/001) and shall complete all applicable requirements in subsections C, D, and F.

If no significant difference is shown between the ACEC and the control in any of the chronic toxicity tests, the Permittee has no effluent limit for chronic toxicity and only subsections E and F apply.

The effluent limit for chronic toxicity is no toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC).

In the event of failure to pass the test described in subsection C, of this section, for compliance with the effluent limit for chronic toxicity, the Permittee is considered to be in compliance with all permit requirements for chronic whole effluent toxicity as long as the requirements in subsection D are being met to the satisfaction of Ecology.

The CCEC means the maximum concentration of effluent allowable at the boundary of the mixing zone assigned in Section S1.B pursuant to WAC 173-201A-100. The CCEC equals 17.1% effluent (dilution factor of 5.86).

C. Monitoring for Compliance With an Effluent Limit for Chronic Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A above on a rotating basis and performed using at a minimum the CCEC, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless Ecology notifies the Permittee in writing of another species rotation schedule.

Compliance with the effluent limit for chronic toxicity means no statistically significant difference in response between the control and the test concentration representing the CCEC. The Permittee shall immediately implement subsection D if any chronic toxicity test conducted for compliance monitoring determines a statistically significant difference in response between the control and the CCEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in response between the control and the CCEC is less than 20%, the hypothesis test shall be conducted at the 0.01 level of significance.

In order to establish whether the chronic toxicity limit is eligible for removal from future permits, the Permittee shall also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine if a statistically significant difference in response exists between the ACEC and the control.

D. Response to Noncompliance With an Effluent Limit for Chronic Toxicity

If a toxicity test conducted for compliance monitoring under subsection C determines a statistically significant difference in response between the CCEC and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted monthly for three consecutive months using the same test and species as the failed compliance test. Testing shall be conducted using a series of at least five effluent concentrations and a control in order to be able to determine appropriate point estimates. One of these effluent concentrations shall equal the CCEC and be compared statistically to the nontoxic control in order to determine compliance with the effluent limit for chronic toxicity as described in subsection C. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by Ecology as an anomalous test result, the Permittee may notify Ecology that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from Ecology before completing the additional monitoring required in this subsection. The notification to Ecology shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by Ecology that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for chronic toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by Ecology that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to Ecology on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the chronic toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to Ecology. The TI/RE plan submittal shall be within sixty (60) days after the sample date for the third additional compliance monitoring test. If the Permittee decides to forgo the rest of the additional compliance monitoring tests required in this subsection because one of the first two additional compliance monitoring tests failed to meet the chronic toxicity limit, then the Permittee shall submit the TI/RE plan within sixty (60) days after the sample date for the first additional monitoring test to violate the chronic toxicity limit. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Chronic Toxicity

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial acute effluent characterization or substitutes approved by Ecology shall be used, and results submitted to Ecology as a part of the permit renewal application process.

F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into Ecology's database, then the Permittee shall send the disk to Ecology along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on 24-hour composite effluent samples. Composite samples taken for toxicity testing shall be cooled to 0 - 6 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. Grab samples must be shipped on ice to the lab immediately upon collection. If a grab sample is received at the testing lab within one hour after collection, it must have a temperature below 20° C at receipt. If a grab sample is received at the testing lab within 4 hours after collection, it must be below 12° C at receipt. All other samples must be 0 - 6° C at receipt. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended. The lab shall store all samples at 0 - 6° C in the dark from receipt until completion of the test.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by Ecology, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC and the CCEC.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020, must be repeated on a fresh sample with an increased number of replicates to increase the power.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to Ecology shall be signed and certified.

A. All permit applications shall be signed by either a responsible corporate officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.

B. All reports required by this permit and other information requested by Ecology shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to Ecology.

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a document under this section shall make the following certification:

> "I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

G2. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.

B. To have access to and copy, at reasonable times and at reasonable cost, any records required to be kept under the terms and conditions of this permit.

C. To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.

D. To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon Ecology's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:

1. Violation of any permit term or condition.
2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
3. A material change in quantity or type of waste disposal.
4. A determination that the permitted activity endangers human health or the environment or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].
5. A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR Part 122.64(4)].
6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
7. Failure or refusal of the permittee to allow entry as required in RCW 90.48.090.

B. The following are causes for modification but not revocation and reissuance except when the permittee requests or agrees:

1. A material change in the condition of the waters of the state.
2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.

6. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
7. Incorporation of an approved local pretreatment program into a municipality's permit.

C. The following are causes for modification or alternatively revocation and reissuance:

1. Cause exists for termination for reasons listed in A1 through A7, of this section, and Ecology determines that modification or revocation and reissuance is appropriate.
2. Ecology has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

G4. REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, but no later than sixty (60) days prior to the proposed changes, give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to Ecology for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities shall be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to Ecology.

A. Transfers by Modification

Except as provided in paragraph B below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies Ecology at least 30 days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittee's containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under the subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G8. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G9. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G10. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to Ecology, within a reasonable time, all information which Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to Ecology upon request, copies of records required to be kept by this permit.

G11. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G12. ADDITIONAL MONITORING

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G13. PAYMENT OF FEES

The Permittee shall submit payment of fees associated with this permit as assessed by Ecology.

G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars ($10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars ($10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G15. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S3.E; and 4) the Permittee complied with any remedial measures required under S4.C of this permit.

In any enforcement proceedings the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G16. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G17. DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G18. TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G19. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

G20. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to Ecology by submission of a new application or supplement thereto at least one hundred and eighty (180) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during non-critical water quality periods and carried out in a manner approved by Ecology.

G21. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to Ecology, it shall promptly submit such facts or information.

G22. REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify Ecology as soon as they know or have reason to believe:

A. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”

1. One hundred micrograms per liter (100 µg/L).
2. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2, 4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony.
3. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
4. The level established by the Director in accordance with 40 CFR 122.44(f).

B. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"

1. Five hundred micrograms per liter (500µg/L).
2. One milligram per liter (1 mg/L) for antimony.
3. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
4. The level established by the Director in accordance with 40 CFR 122.44(f).

G23. COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

APPENDIX A - ECOLOGY AMENDED ORDER NO. 2868

FILE COPY

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

IN THE MATTER OF COMPLIANCE BY Kaiser Aluminum and Chemical Corporation Trentwood Works	)))	AMENDED ORDER No. 2868

To: Mr. Peter S. Bunin
Vice President and General Manager Flat Rolled Products Division
Kaiser Aluminum & Chemical Corporation
Trentwood Works
P.O. Box 15108
Spokane, WA 99215-5108

For the site located at Kaiser Aluminum and Chemical Corporation Trentwood Works, 15000 E. Euclid Avenue, Spokane, WA 99215.

This Amended Order requires Kaiser Aluminum & Chemical Corporation to take the actions described below to comply with Chapter 90.48 RCW and the rules and regulations of the Department of Ecology. This Amended Order supersedes Administrative Order No. 1788 which is hereby rescinded.

I. RECOGNITION OF THE DEPARTMENT'S JURISDICTION

Chapter 90.48.030 of the Revised Code of Washington (RCW) provides the Department of Ecology the jurisdiction to control and prevent the pollution of streams, lakes, rivers, ponds, inland waters, salt waters, water courses, and other surface and underground waters of the State of Washington.

II. FINDING OF FACT

RCW 90.48.120(2) authorizes the Department to issue Administrative Orders requiring compliance whenever it determines that a person has violated or created a substantial potential to violate any provision of Chapter 90.48 RCW or fails to control the polluting content of waste to be discharged to waters of the state. The Department's determination that a violation has occurred, or that there was a substantial potential for a violation to occur is based on the following facts:

#1: During the months of November and December 2002 (prior to implementation of effluent filtration upgrades under Agreed Order No. 02WQER-3487 in spring 2003) the Kaiser Aluminum and Chemical Corporation Trentwood Works discharged significant amounts of PCBs to the Spokane River. Specifically; 14.78 million gallons (MG) @ 25.9 µg/l PCBs on November 18, 2002, 8.77 MG @ 3.22 µg/l PCBs on December 2, 2002, 16.93 MG @ 48.2 µg/l PCBs on December 16, 2002 and 16.46 MG @ 3.42 µg/l PCBs on December 29, 2002.

These amounts are much greater than previously indicated for the Trentwood Works in Kaiser Aluminum & Chemical Corporation's March 29, 2002 engineering report and are at concentrations which calculate as greatly exceeding Human Health criteria of 170 pg/l contained in 40 CFR 131.36 (known as the National Toxics Rule) and referenced in chapter 173-201A-040 (5) WAC.

#2: Kaiser Trentwood's NPDES Permit No. WA-0000892 General Condition G5 says "Facilities shall be constructed and operated in accordance with the approved plans".

The Department of Ecology's May 29, 2002 approval of Kaiser Trentwood's BWSF PCB treatment system was based on achievement of the effluent discharge loading called for in the Filter Influent Design Basis (table 5) of the March 29, 2002 Engineering Report. At the approved maximum flow of 11 MGD and the projected BWSF treatment system PCB removal efficiency, this gives an influent loading of 0.78 gram/day total PCBs. Monitoring reporting has not been adequate to determine if these conditions are being met.

#3: Kaiser Trentwood currently conducts biweekly effluent monitoring following the required HRMS 1668A analytical procedure on the final Outfall #001 discharge. This method provides highly accurate low-level final discharge information but is inherently slow from a laboratory turn-around schedule standpoint.

III. Corrective Actions

For these reasons and in accordance with RCW 90.48.120 (2) it is **ORDERED** that the Kaiser Aluminum & Chemical Corporation take the following actions.

1. Submit a scope of work for the identification and cleanup of PCBs in the facility's wastewater collection and treatment system for Ecology review and approval by November 1, 2005. This scope of work shall, at a minimum, include:

   a) An evaluation of causes for the high PCB values in November and December 2002, and the implementation of procedures (including those listed in response to other sections of this Order) designed to prevent high PCB values in the future and provide prompt reporting of any future high PCB values (see Corrective Action #2);

   b) A diagram of the wastewater collection system;

   c) Procedures for identifying PCBs within wastewater collection and treatment system;

   d) Procedures for sediment PCB sampling within the wastewater collection and treatment system;

   e) Proposed sampling locations

   f) Proposed collection and disposal alternatives for any PCB sediment within the wastewater collection and treatment system;

   g) A summary of previous cleanup and PCB source identification efforts as a part of the basis for the current and upcoming efforts and

   h) A proposed schedule for the above items.

All activities related to the identification and cleanup of PCBs in the wastewater collection and treatment system shall be completed according to the schedule in the approved scope of work. Kaiser shall provide Ecology a report summarizing the status of such identification and cleanup on a semi-annual basis.

The first report will be submitted on or before November 1, 2005 and will summarize the status of identification and cleanup activities undertaken from January through June. The second report will be submitted on or before March 1, 2006 and will summarize the status of identification and cleanup activities undertaken from July through December. Subsequent reports will be submitted on or before September 1 and March 1 and will summarize the status of identification and cleanup activities undertaken from January through June and July through December respectively until the work is complete.

2. Implement the following additional monitoring and reporting activities by November 1, 2005 to document the operation of the BWSF system, assess influent loading conditions/sources and provide for the expedited turn-around of data:

   a) Collect biweekly samples of the effluent from the lagoon (influent to the BWSF system). These samples shall be submitted for analysis utilizing low-level 8082 laboratory procedures that have a target detection limit of 5 ng/L for aroclor 1248.

   b) Collect biweekly samples of the influent to the lagoon from internal outfalls #005 (north outfall) and internal outfall #004 (south outfall). Samples shall be archived for potential later use to respond or track back on the source of an influent upset detected under item 2a. Archived samples not submitted for analysis shall be maintained for a minimum of 30 days after the laboratory results from the item 2a samples have been received by the Department of Ecology.

   c) Collect and summarize the daily flow information from the BWSF system to provide information that (in conjunction with item 2a) can be used to estimate influent PCB loading. BWSF system flows may be calculated using either the discharge flows feeding the individual BWSF filter vessels or the lagoon influent flow measurements.

   d) In the event that any measured influent PCB loading to the BWSF system is calculated to exceed 0.78 grams/day (based on BWSF design parameters) the Department of Ecology shall be notified within one working day and track back investigations initiated. This shall include analysis of the archived lagoon influent samples from that date collected under item 2b. The results of the track back investigation shall be reported to the Department of Ecology as part of the appropriate semi-annual PCB cleanup report.

   e) As part of the normal monthly NPDES discharge monitoring reports, the following additional information shall be provided for the previous calendar month:

i. The sample collection date for final Outfall #001, Outfall 004, and Outfall 005, BWSFS influent and any other wastewater system PCB samples collected.

ii. The analysis results for each complete and final wastewater system PCB analysis report received from the laboratory and the date such data was received.

iii. The concentration, corresponding BWSF daily flow and calculated loading based on laboratory data received during the previous calendar month from items #2c and #2d.

iv. Daily flow monitoring for the BWSFS for all days of the month.

These actions are required at the location known as Trentwood Works located at 15000 E. Euclid Avenue, Spokane, WA 99215.

IV. AMENDMENTS TO THE CORRECTIVE ACTIONS OR SCHEDULE

Amendments to the corrective actions, schedule and laboratory data reporting requirements may be requested for good cause. To be effective, all amendments must be requested in writing at least thirty (30) days prior to the required implementation date, signed by the person with signatory authority for each party and attached to the agreed order.

Good cause includes, but is not limited to, the following:

(1) Delays by the Department in reviewing documents submitted by Kaiser;

(2) Acts of nature, including fire, flood, extreme temperatures, or severe storms; and

(3) Failures by labs and shipping companies that result in the loss or breakage of samples impacting the availability of analysis results (such circumstances shall be reported to the agency within 15 days of Kaiser's receipt of such information).

DATED this 12th day of October 2005 at Spokane, Washington.

James M. Bellatty
Section Manager
Water Quality Program
Eastern Regional Office

PROJECT DESCRIPTION

The project will further investigate the interaction between the Spokane River and the aquifer in the Sullivan Road and Plante's Ferry areas. If the project budget allows, the project will be extended to include the area between Flora Road and Sullivan.

The project will involve collection of water level data in new and existing wells adjacent to and in the general proximity of the river in the project area, collection of surface water flow and elevation data from existing bridges (Sullivan, Trent, Centennial Trail) and elevation data from other stream bank locations using benchmarks (to be installed), and establishing a uniform datum in the study area to correlate the data set. Ideally, the datum will be consistent with the datum established for the ongoing Spokane Valley-Rathdrum Prairie Aquifer Study. The surface and ground water level elevations will be collected on a regular basis over a period of at least one year to evaluate the seasonal characteristics of the hydrologic system.

The proposed new monitoring wells will be constructed of 2" diameter PVC and will likely be installed in locations in the parking areas for the Spokane County Parks Plante's Ferry soccer fields and/or the parking area for the Centennial Trail trailhead at Plante's Ferry Bridge. The exact number and locations of the new monitoring wells is yet to be determined. Existing wells in the area of Sullivan Road and Mirabeau Point will also be monitored. Project surveying and establishment of a uniform datum will be performed by Spokane County.

The funds will be managed by Spokane County Water Resources staff. A unique project code and specific task codes will be established to account for all funds. Financial and technical updates will be provided to Ecology as requested.

A preliminary budget for the project is as follows:

Drilling new wells, including instrumentation for depth to water measurements	200 feet @ $100/foot = $20,000
Surveying to establish a uniform datum and 2-3 stream bank benchmarks	$5,000
Labor (County Staff) to install wells, collect/compile data, maintain database and manage project	$5,000

Spokane County will coordinate with the Spokane Community College Water Resources department to provide volunteer opportunities for students to participate in the project.